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SMITHSONIAN INSTITUTION.

UNITED STATES NATIONAL MUSEUM.

BULLETIN

OF THE

UNITED STATES NATIONAL MUSEUM.

No. 51.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1902.

ADVERTISEMENT.

This work (Bulletin No. 51) is one of a series of papers intended to illustrate the collections belonging to or placed under the charge of the Smithsonian Institution and deposited in the United States National Museum.

The publications of the National Museum consist of two series—the *Bulletin* and the *Proceedings*.

The *Bulletin*, publication of which was commenced in 1875, is a series of elaborate papers issued separately and based for the most part upon collections in the National Museum. They are monographic in scope and are devoted principally to the discussion of large zoological groups, bibliographies of eminent naturalists, reports of expeditions, etc. The bulletins, issued only as volumes with one exception, are of octavo size, although a quarto form, known as the Special Bulletin, has been adopted in a few instances in which a larger page was deemed indispensable.

The *Proceedings* (octavo), the first volume of which was issued in 1878, are intended primarily as a medium of publication for newly acquired facts in biology, anthropology, and geology, descriptions of new forms of animals and plants, discussions of nomenclature, etc. A volume of about 1,000 pages is issued annually for distribution to libraries, while a limited edition of each paper in the volume is printed and distributed in pamphlet form in advance.

In addition, there are printed each year in the second volume of the Smithsonian Report (known as the Report of the National Museum) papers, chiefly of an ethnological character, describing collections in the National Museum.

Papers intended for publication by the National Museum are usually referred to an advisory committee, composed as follows: Frederick W. True (chairman), William H. Holmes, George P. Merrill, James E. Benedict, Otis T. Mason, Leonhard Stejneger, Lester F. Ward, and Marcus Benjamin (editor).

S. P. Langley,
Secretary of the Smithsonian Institution.

Washington, U. S. A., *April 4, 1902.*

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A LIST

OF

THE PUBLICATIONS

OF THE

UNITED STATES NATIONAL MUSEUM

(1875-1900)

INCLUDING THE ANNUAL REPORTS, PROCEEDINGS, BULLETINS, SPECIAL BULLETINS, AND CIRCULARS,

WITH INDEX TO TITLES.

BY

RANDOLPH I. GEARE,
Chief, Division of Correspondence and Documents.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1902.

PREFACE.

The purpose of this bulletin is to present a list, with index to titles, of the publications of the U. S. National Museum, which consist of an annual Report, an annual volume of Proceedings, Bulletins, Special Bulletins, and Circulars.

The Report constitutes the second volume of the Smithsonian Report, and the first one thus issued is for the year 1884. A certain number of these volumes is assigned to the Museum for distribution to libraries, to correspondents, and to contributors to the collections, while a considerable part of the edition is distributed by members of Congress. The special papers in these volumes, for the most part describing ethnological collections in the National Museum, are furnished free to those interested.

The series of Proceedings of the National Museum began in 1878, and 23 volumes, containing 1,240 separate papers, have been published. These papers, which are technical, describe, or are based wholly or in part upon, material in the Museum. The volumes are sent only to libraries, while the separate papers are furnished without charge to specialists and others engaged in scientific work.

The first number of the Bulletin was issued in 1875. Of the latest in the series, No. 50 (The Birds of North and Middle America), only the first volume, relating to the Fringillidæ, has been issued. The bulletins are intended principally for libraries, but are also given to known specialists working on the groups to which they relate.

Special Bulletins, in quarto, have been issued at irregular intervals, but this form has been used only where a size larger than octavo was deemed especially desirable. The last one published (No. IV) is the first volume of a monograph of the American Hydroids, and relates to the group Plumularidæ.

The primary object of the issuance of the series of Circulars was to bring to immediate notice urgent wants of the Museum, or to promulgate special information with the least possible delay. The first circular was published in 1881, and at the time when the present list was sent to the Printing Office this series contained fifty numbers.

None of the above-mentioned publications are sold by the Museum, but when the Museum can not supply them, persons desiring to purchase are advised to write to the Superintendent of Documents, Union Building, Washington, D. C.

Occasionally the Museum exchanges its publications for desirable specimens.

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510— | Report | of the | Assistant Director | of the | U. S. National Museum, | G. Brown Goode, | for the year 1881. | —— | From the Smithsonian Report for 1881. | —— | Washington: | Government Printing Office. | 1883.

8vo., pp. 1-79.

Report of Assistant Director ..... pp. 1-30.
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This was the first report on the operations of the National Museum printed under a separate cover. The reports of the Museum for 1881, 1882, and 1883, were first printed in the reports of the Institution for those years, and were afterwards issued in pamphlet form.

The Museum Report for 1884 was the first one to occupy a separate volume of the Smithsonian Report, and to be accompanied by papers based upon the collections.

524— | Report | of the | Assistant Director | of the | U. S. National Museum, | G. Brown Goode, | for the year 1882. | —— | From the Smithsonian Report, 1882. | —— | Washington: | Government Printing Office. | 1883.

8vo., pp. 1-145.

Report of Assistant Director ..... pp. 1-48.
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List of contributors ..... pp. 113-145.

587— | Report | of the | Assistant Director | and of | the Curators | of the | U. S. National Museum | for | the year 1883. | ——— | From the Smithsonian Report for 1883. | ——— | Washington: | Government Printing Office. | 1885.

8vo., pp. 1-200.

Report of the Assistant Director ..... pp. 1-30.
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Materia Medica. By J. M. Flint. pp. 30-35.
Foods and Textile Industries. By Romyn Hitchcock. pp. 36-38.
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Fossil Plants. By Lester F. Ward. p. 103.
Lithology and Physical Geology. By George P. Merrill. pp. 103–106.
Minerals. By F. W. Clarke. pp. 106–108.
Metallurgy and Economic Geology. By Fred P. Dewey. pp. 108–111.
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Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | for the year 1884. | ——— | Part II. | ——— | Washington: | Government Printing Office. | 1885.

8vo., pp. ix, 1–458, 105 pls.

Beginning with this year and continuing until 1892, the reports consist of Part I, Report of the Assistant Director [after 1885 this title was changed to Assistant Secretary]; Part II, Reports of the Curators and Acting Curators; Part III, Papers based on collections in the National Museum; Part IV, Bibliography; Part V, List of accessions to the Museum.

Report of Assistant Director ..... pp. 1–72.
Reports of curators ..... pp. 75–276.
Materia Medica. By H. G. Beyer. pp. 75–77.
Textile Industries. By Romyn Hitchcock. pp. 79–84.
Naval Architecture. By Joseph W. Collins. pp. 85–106.
Foods. By Romyn Hitchcock. pp. 107–108.
Ethnology. By Otis T. Mason. pp. 109–120.
American Aboriginal Pottery. By William H. Holmes. pp. 121–122.
Antiquities. By Charles Rau. pp. 123–127.
Mammals. By Frederick W. True. pp. 129–142.
Birds. By Robert Ridgway. pp. 143–155.
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Invertebrate Fossils (Mesozoic and Cenozoic). By C. A. White. pp. 215–217.
Fossil Plants. By Lester F. Ward. pp. 219–220.
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Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | to July, 1885.[1] | ——— | Part II. | ——— | Washington: | Government Printing Office. | 1886.

8vo., pp. xi, 1-264; vii, 1-939, 144 pls.

Report of Assistant Director ..... pp. 1-54.
Reports of curators ..... pp. 55-147.
Materia Medica. By H. G. Beyer. pp. 57-58.
Textile Industries. By Romyn Hitchcock. pp. 59-60.
Foods. By Romyn Hitchcock. p. 61.
Enthnology. By Otis T. Mason. pp. 63-67.
American Prehistoric Pottery. By W. H. Holmes. p. 69.
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Mammals. By Frederick W. True. pp. 79-84.
Birds. By Robert Ridgway. pp. 85-91.
Reptiles and Batrachians. By H. C. Yarrow. pp. 93-94.
Fishes. By Tarleton H. Bean. pp. 95-98.
Comparative Anatomy. By Frederick W. True. pp. 99-102.
Mollusks. By William Healey Dall. pp. 103-111.
Insects. By C. V. Riley. pp. 113-116.
Marine Invertebrates. By Richard Rathbun. pp. 117-127.
Invertebrate Fossils (Paleozoic). By C. D. Walcott. pp. 129-132.
Invertebrate Fossils (Meso-Cenozoic). By Charles A. White. p. 133.
Plants. By Lester F. Ward. pp. 135-136.
Minerals. By F. W. Clarke. pp. 137-138.
Lithology and Physical Geology. By George P. Merrill. pp. 139-142.
Metallurgy and Economic Geology. By F. P. Dewey. pp. 143-147.
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Paper on the George Catlin Indian Gallery ..... pp. 1-939.

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8vo., pp. xi, 1-842, 16 pls., 23 figs.

Report of Assistant Secretary ..... pp. 1-83.
Reports of curators ..... pp. 85-252.
Ethnology. By Otis T. Mason. pp. 87-96.
American Aboriginal Pottery. By W. H. Holmes. pp. 97-100.
Archæology. By Charles Rau. pp. 101-112; 4 pls., 20 figs.
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Steam Transportation. By J. Elfreth Watkins. pp. 119-141; 5 pls., 9 figs.
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Insects. By C. V. Riley. pp. 181-197; 1 pl., 5 figs.

[1] It having been decided to issue future reports by the fiscal year instead of by the calendar year, this volume covers only the first six months of the year 1885.

Marine Invertebrates. By Richard Rathbun. pp. 199–207.
Comparative Anatomy. By Frederick W. True. pp. 209–213.
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8vo., pp. xviii, 1–771, 32 pls., 125 figs.

Report of Assistant Secretary ..... pp. 1–62.
Reports of curators..... pp. 63–558.
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Transportation. By J. Elfreth Watkins. pp. 79–81; 1 pl., 2 figs.
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8vo., pp. xxii, 1–876, 108 pls., 2 charts, 174 figs., 4 diagrams, 1 map.

Report of Assistant Secretary ..... pp. 1–84.

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pp. xviii, 1–811, 163 pls., 99 figs.

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8vo., pp. xvii, 1–869, 84 pls., 151 figs., 3 diagrams.

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8vo., pp. xv, 1–620, 103 pls., 5 figs.

Report of Assistant Secretary..... pp. 1–97.
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[1] Reprint of a lecture delivered in the National Museum on April 13, 1889.

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[1] Reprinted from The Atlantic Monthly, July, 1893, pp. 112–119.

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R. 118. A sketch of the history of the ceramic art in China, with a catalogue of the Hippisley collection of Chinese porcelains. By Alfred E. Hippisley.
pp. 305–416, 21 pls.

R. 119. Contributions to the history of musical scales. By Charles K. Wead.
pp. 417–462, 10 pls., 8 figs.

R. 120. A collection of Hopi ceremonial pigments. By Walter Hough.
pp. 463–471.

R. 121. Descriptive catalogue of the collections of gems in the U. S. National Museum. By Wirt Tassin.
pp. 473–670, 9 pls., 26 figs.

R. 122. Descriptive catalogue of the meteorite collection in the U. S. National Museum. By Wirt Tassin.
pp. 671–698, 4 pls.

III.—PROCEEDINGS OF THE U. S. NATIONAL MUSEUM.[1]

[VOLUMES I–XXIII.]

VOLUME I, CONTAINING PAPERS 1–61.

Department of the Interior: | U. S. National Museum. | —— 17 —— | Proceedings | of the | United States National Museum. | Vol. 1. | 1878. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1879.

8vo., pp. iv, 1–520, 8 pls., 7 figs.

P. 1. Descriptions of new forms of mollusks from Alaska contained in the collections of the National Museum. By William H. Dall.
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P. 2. Postpliocene fossils in the coast range of California. By William H. Dall.
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P. 3. Notes on the American species of the genus *Cybium*. By Felipe Poey.
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P. 9. The manufacture of porpoise oil. By Caleb Cook.
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P. 14. Distribution of Californian tertiary fossils. By William H. Dall.
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P. 15. A revision of the American species of the genus *Brevoortia*, with a description of a new species from the Gulf of Mexico. By G. Brown Goode.
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P. 18. Descriptions of new species of shells from California in the collections of the National Museum. By William H. Dall.
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P. 19. Catalogue of the birds of Dominica from collections made for the Smithsonian Institution by Frederick A. Ober, together with his notes and observations. By George N. Lawrence.
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P. 20. Notes on a collection of fishes from Clackamas River, Oregon. By David S. Jordan.
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P. 21. A review of the American species of the genus *Scops*, Savigny. By Robert Ridgway.
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P. 22. Notes on the ornithology of southern Texas, being a list of birds observed in the vicinity of Fort Brown, Texas, from February, 1876, to June, 1878. By James C. Merrill.
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P. 23. On a serranoid fish, *Epinephelus drummond-hayi*, from the Bermudas and Florida. By G. Brown Goode and Tarleton H. Bean.
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P. 39. Description of two new species of birds from Costa Rica, and notes on other rare species from that country. By Robert Ridgway.
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P. 48. Report on the limpets and chitons of the Alaskan and Arctic regions, with descriptions of genera and species believed to be new. By William H. Dall.
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P. 55. Notes on the fishes of Beaufort Harbor, North Carolina. By David S. Jordan and Charles H. Gilbert.
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Department of the Interior: | U. S. National Museum. | —— 19 —— | Proceedings | of the | United States National Museum. | Vol. II. | 1879. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1880.

8vo., pp. iv, 1-499, 7 pls., 2 figs.

P. 62. Notes on the nests and eggs of the eight North American species of *Empidonaces*. By T. M. Brewer.
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P. 63. A list of European fishes in the collection of the United States National Museum. By Tarleton H. Bean.
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P. 64. Description of a species of *Lycodes* (*L. paxillus*), obtained by the United States Fish Commission. By G. Brown Goode and Tarleton H. Bean.
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P. 65. Description of a new species of *Liparis* (*L. ranula*), obtained by the United States Fish Commission off Halifax, Nova Scotia. By G. Brown Goode and Tarleton H. Bean.
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P. 68. Description of *Alepocephalus bairdii*, a new species of fish from the deep-sea fauna of the western Atlantic. By G. Brown Goode and Tarleton H. Bean.
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P. 69. On the species of *Astroscopus* of the eastern United States. By Tarleton H. Bean.
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P. 70. On the occurrence of *Hippoglossus vulgaris* Flem., at Unalashka and Saint Michael's, Alaska. By Tarleton H. Bean.
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P. 73. A preliminary catalogue of the fishes of the Saint John's River and the east coast of Florida, with descriptions of a new genus and three new species. By G. Brown Goode.
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P. 74. Catalogue of a collection of fishes sent from Pensacola, Florida, and vicinity, by Mr. Silas Stearns, with description of six new species. By G. Brown Goode and Tarleton H. Bean.
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P. 76. Notice of recent additions to the marine invertebrata, of the northeastern coast of America, with descriptions of new genera and species and critical remarks on others. (Part I. Annelida, Gephyræa, Nemertina, Nematoda, Polyzoa, Tunicata, Mollusca, Anthozoa, Echinodermata, Porifera.) By A. E. Verrill.
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P. 77. Description of a new genus and species of fish, *Lopholatilus chamæleonticeps*, from the south coast of New England. By G. Brown Goode and Tarleton H. Bean.
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P. 78. On the occurrence of *Lycodes vahlii* Reinhardt, on La Have and Grand Banks. By G. Brown Goode and Tarleton H. Bean.
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P. 80. Description of a new fish from Alaska (*Anarrhichas lepturus*), with notes upon other species of the genus *Anarrhichas*. By Tarleton H. Bean.
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P. 82. List of marine invertebrata from the New England coast, distributed by the U. S. Commission of Fish and Fisheries.[1] By Richard Rathbun.
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P. 83. Occurrence of *Chelura terebrans*, a crustacean destructive to the timber of submarine structures, on the coast of the United States. By Sidney I. Smith.
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P. 86. Descriptions of new species of carboniferous invertebrate fossils. By C. A. White.
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[1] For lists of the specimens contained in Series II, III, IV, see Nos. 230, 231, 371; and in Series V, see Rep. U.S.N.M., 1895, pp. 292-298.

P. 87. A study of the trunk-fishes (Ostraciontidæ), with notes upon the American species of the family. By G. Brown Goode.
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P. 92. Note on *Criocardium* and *Ethmocardium*. By C. A. White.
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P. 93. Descriptions of new cretaceous invertebrate fossils from Kansas and Texas. By C. A. White.
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P. 94. Notes on a collection of fishes obtained in the stream of Guanajuato and in Chapala Lake, Mexico, by Prof. A. Dugès. By David S. Jordan.
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P. 95. Descriptions of two species of fishes collected by Prof. A. Dugès in central Mexico. By Tarleton H. Bean.
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Department of the Interior: | U. S. National Museum. | —— 25 —— | Proceedings | of the | United States National Museum. | Vol. III. | 1880. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1881.

8vo., pp. v, 1-589, 2 pls., 11 figs.

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P. 123. Description of a new genus and some new species of California fishes (*Icosteus ænigmaticus* and *Osmerus attenuatus*). By W. N. Lockington.
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P. 125. Description of a new species of *Sebastichthys* (*Sebastichthys miniatus*), from Monterey Bay, California. By David S. Jordan and Charles H. Gilbert.
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[1] For list of fishes distributed in 1881 see No. 185. The list of a later distribution is printed in the Rep. U. S. Nat. Mus., 1895, pp. 278–280.

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pp. 719-723, 2 pls.

P. 1233. A review of the lancelets, hagfishes, and lampreys of Japan, with a description of two new species. By David S. Jordan and John O. Snyder.
pp. 725-734, 1 plate.

P. 1234. The proper names of *Bdellostoma* or *Heptatrema*. By Theodore Gill.
pp. 735-738.

P. 1235. List of fishes collected in 1883 and 1885 by Pierre Louis Jouy and preserved in the United States National Museum, with descriptions of six new species. By David S. Jordan and John O. Snyder.
pp. 739-769, 8 pls.

P. 1236. Four new symmetrical hermit crabs (Pagurids) from the West India region. By James E. Benedict.
pp. 771-778, 7 figs.

P. 1237. Synopsis of the Lucinacea and of the American species. By William H. Dall.
pp. 779-833, 4 pls.

P. 1238. On a slug of the genus *Veronicella* from Tahiti. By T. D. A. Cockerell.
pp. 835–836.

P. 1239. A review of the apodal fishes or eels of Japan, with descriptions of nineteen new species. By David S. Jordan and John O. Snyder.
pp. 837–890, 20 figs.

P. 1240. A review of the cardinal fishes of Japan. By David S. Jordan and John O. Snyder.
pp. 891–913, 2 pls., 10 figs.

IV. BULLETINS OF THE U. S. NATIONAL MUSEUM.

(NOS. 1-50.)

B. 1. Check-list of North American batrachia and reptilia; with a systematic list of the higher groups, and an essay on geographical distribution. Based on the specimens contained in the U. S. National Museum. By Edward D. Cope.
8vo., 1875, pp. 1-104.

B. 2. Contributions to the natural history of Kerguelen Island, made in connection with the American [United States] Transit-of-Venus expedition, 1874-75. By J. H. Kidder, M. D., passed assistant surgeon, U. S. Navy. I. Ornithology. Edited by Dr. Elliott Coues, U. S. A.
8vo., 1875, pp. ix, 1-51.

B. 3. Contributions to the natural history of Kerguelen Island, made in connection with the United States Transit-of-Venus expedition, 1874-75. By J. H. Kidder, M. D., passed assistant surgeon, U. S. Navy. II.
8vo., 1876, pp. 1-122.

B. 4. Birds of southwestern Mexico. Collected by Francis E. Sumichrast for the United States National Museum. Prepared by George N. Lawrence.
8vo., 1875, pp. 1-56.

B. 5. Catalogue of the fishes of the Bermudas. Based chiefly upon the collections of the United States National Museum. By G. Brown Goode, M. A., assistant curator, U. S. National Museum.
8vo., 1876, pp. 1-82.

B. 6. International Exhibition, 1876. Board on behalf of United States executive departments. Classification of the collection to illustrate the animal resources of the United States. A list of substances derived from the animal kingdom, with synopsis of the useful and injurious animals and a classification of the methods of capture and utilization. By G. Brown Goode, M. A., assistant curator, U. S. National Museum.
8vo., 1876, pp, xiii, 1-126.

B. 7. Contributions to the natural history of the Hawaiian and Fanning islands and Lower California, made in connection with the United States North Pacific surveying expedition, 1873–1875. By Thos. H. Streets, M. D., passed assistant surgeon, U. S. Navy.
8vo., 1877, pp. 1–172.

B. 8. Index to the names which have been applied to the subdivisions of the class Brachiopoda excluding the rudistes previous to the year 1877. By W. H. Dall, U. S. Coast Survey.
8vo., 1877, pp. 1–88.

B. 9. Contributions to North American ichthyology. Based primarily on the collections of the United States National Museum. I. Review of Rafinesque's Memoirs on North American Fishes. By David S. Jordan.
8vo., 1877, pp. 1–53.

B. 10. Contributions to North American ichthyology. Based primarily on the collections of the United States National Museum. II. A.—Notes on Cottidæ, Etheostomatidæ, Percidæ, Centrarchidæ, Aphododeridæ, Dorysomatidæ, and Cyprinidæ, with revisions of the genera and descriptions of new or little known species. B.—Synopsis of the Siluridæ of the fresh waters of North America. By David S. Jordan.
8vo., 1877, pp. 1–120, 45 pls.

B. 11. Bibliography of the fishes of the Pacific coast of the United States to the end of 1879. By Theodore Gill.
8vo., 1882, pp. 1–73.

B. 12. Contributions to North American ichthyology. Based primarily on the collections of the United States National Museum. III. A.—On the distribution of the fishes of the Alleghany region of South Carolina, Georgia, and Tennessee, with descriptions of new or little known species. By David S. Jordan and Alembert W. Brayton. B.—A synopsis of the family Catostomidæ. By David S. Jordan.
8vo., 1878, pp. 1–237.

B. 13. The flora of St. Croix and the Virgin islands. By Baron H. F. A. Eggers.
8vo., 1879, pp. 1–133.

B. 14. International Exhibition, 1876. Catalogue of the collection to illustrate the animal resources and the fisheries of the United States, exhibited at Philadelphia in 1876 by the Smithsonian Institution and the United States Fish Commission, and forming a part of the United States National Museum. Prepared under the direction of G. Brown Goode.
8vo., 1879, pp. xvi, 1–351.

B. 15. Contributions to the natural history of Arctic America, made in connection with the Howgate Polar expedition, 1877–78. By Ludwig Kumlien, naturalist of the expedition.
8vo., 1879, pp. 1–179.

B. 16. Synopsis of the fishes of North America. By David S. Jordan and Charles H. Gilbert.
8vo., 1882, pp. lvi, 1-1018.

B. 17. On the zoological position of Texas. By Edward D. Cope.
8vo., 1880, pp. 1-51.

B. 18. International Fishery Exhibition, Berlin, 1880. Exhibit of the fisheries and fish culture of the United States of America, at the Internationale Fischerei-Ausstellung, held at Berlin, April 20, 1880, and forming a part of the collections of the National Museum, made by the United States Fish Commission. Prepared under the direction of G. Brown Goode, deputy commissioner.
8vo., 1880, pp. xv, 1-263.

B. 19. Nomenclator Zoologicus. An alphabetical list of all generic names that have been employed by naturalists for recent and fossil animals from the earliest times to the close of the year 1879. In two parts: I. Supplemental list. II. Universal index. By Samuel H. Scudder.
8vo., 1882, pp. xxi, 1-376, 1-340.

B. 20. Bibliographies of American naturalists. I. The published writings of Spencer Fullerton Baird, 1843-1882. By G. Brown Goode, assistant director of the National Museum.
8vo., 1883, pp. xvi, 1-377, frontispiece.

B. 21. Nomenclature of North American birds chiefly contained in the United States National Museum. By Robert Ridgway.
8vo., 1881, pp. 1-94.

B. 22. Guide to the flora of Washington and vicinity. By Lester F. Ward, A. M.
8vo., 1881, pp. 1-264, 1 map.

B. 23. Bibliographies of American naturalists. II. The published writings of Isaac Lea, LL. D. By Newton Pratt Scudder.
8vo., 1885, pp. lix, 1-278, frontispiece.

B. 24. Check list of North American reptilia and batrachia, with catalogue of specimens in U. S. National Museum. By H. C. Yarrow, M. D., honorary curator, department of reptiles.
8vo., 1882, pp. v, 1-249.

B. 25. Contributions to the natural history of the Bermudas. Edited by J. Matthew Jones and George Brown Goode.
8vo., 1884, pp. xxiii, 1-353, 12 pls.

Part I.—Geology. By Prof. William North Rice (pp. 1-32, 5 pls.).
Part II.—Botany. By Gen. Sir John Henry Lefroy (pp. 33-141).
Part III.—Mammals. By J. Matthew Jones (pp. 143-161).
Part IV.—Birds. By Capt. Savile G. Reid (pp. 163-279).
Part V.—Notes on birds. By Dr. C. Hart Merriam (pp. 281-284).
Part VI.—Reptiles. By Samuel Garman (pp. 285-303).
Part VII.—Annelids. By Prof. H. E. Webster (pp. 305-327, 6 pls.).

B. 26. Avifauna Columbiana: being a list of birds ascertained to inhabit the District of Columbia, with the times of arrival and departure of such as are non-residents, and brief notices of habits, etc. The second edition, revised to date, and entirely rewritten. By Elliott Coues, M. D., Ph. D., professor of anatomy in the National Medical College, etc., and D. Webster Prentiss, A. M., M. D., professor of materia medica and therapeutics in the National Medical College, etc.

8vo., 1883, pp. 1-133, 2 pls., 100 figs.

B. 27. Great International Fisheries Exhibition, London, 1883. Descriptive catalogues of the collections sent from the United States to the International Fisheries Exhibition, London, 1883, constituting a report upon the American section. Prepared under the direction of G. Brown Goode, U. S. commissioner, and a staff of associates.

8vo., 1884, pp. liv, 1-1279.

Great international fisheries exhibition. London, 1883. United States of America. A. Preliminary catalogue and synopsis of the collections exhibited by the United States Fish Commission and by special exhibitors. With a concordance to the official classification of the exhibition. 8vo., 1883, pp. 1-105.

Great international fisheries exhibition. London, 1883. United States of America. B. Collection of economic crustaceans, worms, echinoderms, and sponges. By Richard Rathbun, curator of the department of marine invertebrates in the United States National Museum. 8vo., 1883, pp. 107-137.

Great international fisheries exhibition. London, 1883. United States of America. C. Catalogue of the aquatic and fish-eating birds exhibited by the United States National Museum. By Robert Ridgway, curator, department of birds, U. S. National Museum. 8vo., 1883, pp. 139-184.

Great international fisheries exhibition. London, 1883. United States of America. D. Catalogue of the economic mollusca and the apparatus and appliances used in their capture and preparation for market, exhibited by the United States National Museum. By Lieut. Francis Winslow, U. S. Navy. 8vo., 1883, pp. 185-270.

Great international fisheries exhibition. London, 1883. United States of America. E. The whale fishery and its appliances. By James Temple Brown, assistant in the department of art and industry, U. S. National Museum. 8vo., 1883, pp. 271-386.

Great international fisheries exhibition. London, 1883. United States of America. F. Catalogue of the collections of fishes exhibited by the United States National Museum. By Tarleton H. Bean, curator of the department of fishes in the United States National Museum. 8vo., 1883, pp. 387-510.

Great international fisheries exhibition. London, 1883. United States of America. G. Descriptive catalogue of the collection illustrating the scientific investigation of the sea and fresh waters. By Richard Rathbun, curator of the department of marine invertebrates in the United States National Museum. 8vo., 1883, pp. 511-621.

Great international fisheries exhibition. London, 1883. United States of America. H. Catalogue of the aquatic mammals exhibited by the United States National Museum. By Frederick W. True, curator of the department of mammals, United States National Museum. 8vo., 1884, pp. 623–644.

Great international fisheries exhibition. London, 1883. United States of America. I. Catalogue of the collection illustrating the fishing vessels and boats, and their equipment; the economic condition of fishermen; anglers' outfits, etc. By Capt. J. W. Collins, assistant, U. S. Fish Commission. 8vo., 1884, pp. 645–823.

Great international fisheries exhibition. London, 1883. United States of America. J. Catalogue of the apparatus for the capture of fish exhibited by the United States National Museum. By R. Edward Earll, curator of the fisheries collections, U. S. National Museum, and assistant U. S. Fish Commission. 8vo., 1884, pp. 825–1030.

Great international fisheries exhibition. London, 1883. United States of America. K. Catalogue of fishery products, and of the apparatus used in their preparation. By A. Howard Clark, assistant in the department of art and industry, United States National Museum. 8vo., 1884, pp. 1031–1154.

Great international fisheries exhibition. London, 1883. United States of America. L. Catalogue of the fish-cultural exhibit of the United States Fish Commission. By R. Edward Earll, curator of the fisheries collections, U. S. National Museum, and assistant, U. S. Fish Commission. 8vo., 1884, pp. 1155–1249.

B. 28. A manual of American land shells. By W. G. Binney.
8vo., 1885, pp. 1–528, 516 figs.

B. 29. Results of ornithological explorations in the Commander Islands and in Kamtschatka. By Leonhard Stejneger.
8vo., 1885, pp. 1–382, 8 pls., 7 figs., 1 map.

B. 30. Bibliographies of American naturalists. III. Bibliography of publications relating to the collection of fossil invertebrates in the United States National Museum, including complete lists of the writings of Fielding B. Meek, Charles A. White,[1] and Charles D. Walcott. By John Belknap Marcou.
8vo., 1885, pp. 1–333.

B. 31. Bulletin of the United States National Museum. No. 31. Synopsis of the North American Syrphidæ. By Samuel W. Williston, M. D., Ph. D.
8vo., 1886, pp. xxx, 1–335, 12 pls.

B. 32. Catalogue of batrachians and reptiles of Central America and Mexico. By E. D. Cope.
8vo., 1887, pp. 1–98.

B. 33. Catalogue of minerals and synonyms. By T. Egleston, Ph. D.
8vo., 1887, pp. 1–198.

B. 34. The batrachia of North America. By E. D. Cope.
8vo., 1889, pp. 1–525, 86 pls., 119 figs.

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[1] For supplementary list, see P. 1135.

B. 35. Bibliographical catalogue of the described transformations of North American lepidoptera. By Henry Edwards.
8vo., 1889, pp. 1-147.

B. 36. Contributions to the natural history of the cetaceans. A review of the family Delphinidæ. By Frederick W. True, curator of the department of mammals, United States National Museum.
8vo., 1889, pp. 1-191, 47 pls.

B. 37. A preliminary catalogue of the shell-bearing marine mollusks and brachiopods of the south-eastern coast of the United States, with illustrations of many of the species. By William Healey Dall, A. M., honorary curator, department of mollusks, U. S. National Museum.
8vo., 1889, pp. 1-221, 74 pls.

B. 38. Contribution toward a monograph of the insects of the lepidopterous family Noctuidæ of temperate North America. Revision of the species of the genus *Agrotis*. By John B. Smith, professor of entomology, Rutgers College, New Jersey.
8vo., 1890, pp. iv, 1-237, 5 pls.

B. 39. [Directions for collecting and preserving specimens.]

Part A.—Directions for collecting birds. By Robert Ridgway. 8vo., 1891, pp. 1-27, 9 figs.

Part B.—Directions for collecting recent and fossil plants. By F. H. Knowlton (with notes on collecting and preserving fresh-water algæ, by Frank S. Collins). 8vo., 1891, pp. 1-46, 10 figs.

Part C.—Notes on the preparation of rough skeletons. By Frederic A. Lucas. 8vo., 1891, pp. 1-11, 12 figs.

Part D.—Directions for collecting, preparing, and preserving birds' eggs and nests. By Charles Bendire. 8vo., 1891, pp. 1-10, 7 figs.

Part E.—Directions for collecting reptiles and batrachians (with supplementary note giving directions for preserving small herpetological specimens in formalin). By Leonhard Stejneger. 8vo., 1891, pp. 1-13, 5 figs.

Part F.—Directions for collecting and preserving insects. By C. V. Riley, M. A., Ph. D. 8vo., 1892, pp. 1-147, 1 plate, 139 figs.

Part G.—Instructions for collecting mollusks, and other useful hints for the conchologist. By William H. Dall. 8vo., 1892, pp. 1-56, 8 figs.

Part H.—Directions for collecting minerals. By Wirt Tassin. 8vo., 1895, pp. 1-6, 8 figs.

Part I.—Directions for collecting rocks and for the preparation of thin sections. By George P. Merrill. 8vo., 1895, pp. 1-15, 17 figs.

Part J.—Directions for collecting specimens and information illustrating the aboriginal uses of plants. By Frederick V. Coville. 8vo., 1895, pp. 1-8.

Part K.—Directions for collecting and preparing fossils. By Charles Schuchert. 8vo., 1895, pp. 1-31, 13 figs.

Part L.—Directions for collecting and preserving scale insects (Coccidæ). By T. D. A. Cockerell. 8vo., 1897, pp. 1-9.

Part M.—The methods employed at the Naples Zoological Station for the preservation of marine animals. By Dr. Salvatore Lo Bianco. Translated from the original Italian by Edmund Otis Hovey. 8vo., 1899, pp. 1-42, frontispiece.

Part N.—Directions for preparing study specimens of small mammals. By Gerrit S. Miller, jr. 8vo., 1899, pp. 1–10, 1 fig.

Part N.—Second edition, revised, with abstracts in German, French, and Spanish. 8vo., 1901, pp. 1–25, 3 figs.

Part O.—Directions for collecting and rearing dragonflies, stoneflies, and mayflies. By James G. Needham, Ph. D. 8vo., 1899, pp. 1–9, 4 figs.

B. 40. Bibliographies of American naturalists. IV. The published writings of George Newbold Lawrence, 1844–1891. By L. S. Foster.

8vo., 1892, pp. xi, 1–124, frontispiece.

B. 41. Bibliographies of American naturalists. V. The published writings of Dr. Charles Girard. By George Brown Goode.

8vo., 1891, pp. vi, 1–141, frontispiece.

B. 42. A preliminary descriptive catalogue of the systematic collections in economic geology and metallurgy in the United States National Museum. By Frederic P. Dewey.

8vo., 1891, pp. xviii, 1–256, 34 pls., 10 figs.

B. 43. A monograph of the bats of North America. By Harrison Allen, M. D.

8vo., 1893, pp. ix, 1–198, 38 pls., 1 diagram.

B. 44. A catalogue, bibliographical and synonymical, of the species of moths of the lepidopterous superfamily Noctuidæ, found in boreal America, with critical notes. By John B. Smith, Sc. D.

8vo., 1893, pp. 1–424.

B. 45. A monograph of the North American Proctotrypidæ. By William H. Ashmead.

8vo., 1893, pp. 1–472, 18 pls., 2 figs.

B. 46. The myriapoda of North America. By Charles Harvey Bollman. Edited by L. M. Underwood.

8vo., 1893, pp. 1–210.

B. 47. The fishes of North and Middle America: A descriptive catalogue of the species of fish-like vertebrates found in the waters of North America, north of the Isthmus of Panama. By David Starr Jordan, Ph. D., president of the Leland Stanford Junior University, and Barton Warren Evermann, Ph. D., ichthyologist of the United States Fish Commission.

8vo., 4 vols., pp. 1–3313, 392 pls.

Part I.—1896, pp. lx, 1–1240.

Part II.—1898, pp. xxx, 1241–2183.

Part III.—1898, pp. xxiv, 2183*a*–3136.

Part IV.—1900, pp. ci, 3137–3313; 392 pls.

B. 48. Contributions toward a monograph of the insects of the lepidopterous family Noctuidæ of boreal North America. A revision of the deltoid moths. By John B. Smith, Sc. D., professor of entomology in Rutgers College.

8vo., 1895, pp. i–vi, 1–129, 14 pls.

B. 49. The published writings of Philip Lutley Sclater, 1844–1896. Prepared under the direction of G. Brown Goode.
8vo., 1896, pp. xix, 1–135, frontispiece.

B. 50. The birds of North and Middle America: A descriptive catalogue of the higher groups, genera, species, and subspecies of birds known to occur in North America, from the Arctic lands to the Isthmus of Panama, the West Indies and other islands of the Caribbean Sea, and the Galapagos Archipelago. By Robert Ridgway, curator, division of birds. Part I. Family Fringillidæ—The Finches.
8vo., 1901, pp. i–xxx, 1–715, 20 pls. (Additional parts in preparation.)

V. SPECIAL BULLETINS OF THE U. S. NATIONAL MUSEUM.

(NOS. I–IV.)

I. Smithsonian Institution. | United States National Museum. | Special Bulletin No. 1. | —— | Life histories | of | North American birds | with special reference to | their breeding habits and eggs, | with | twelve lithographic plates. | By | Charles Bendire, captain, U. S. Army (retired), | Honorary Curator of the Department of Oölogy, U. S. National Museum, | member of the American Ornithologists' Union. | —— | Washington: | Government Printing Office | 1892.

4to., pp. viii, 1–446, 12 pls.

II. Smithsonian Institution. | United States National Museum. | —— | Special Bulletin. | —— | Oceanic Ichthyology, | a treatise on the | deep-sea and pelagic fishes of the world, | based chiefly upon | the collections made by the steamers Blake, Albatross, | and Fish Hawk in the Northwestern Atlantic, | with | an atlas containing 417 figures, | By | George Brown Goode, Ph. D., LL. D., | Assistant Secretary, Smithsonian Institution, in charge of U. S. National Museum, | and | Tarleton H. Bean, M. D., M. S., | Director of the New York Aquarium. | —— | Washington: | Government Printing Office. | 1895.

4to., Vol. I, pp. xxxv, 1–553, 24 figs., 1 diagram; Vol. II, pp. xxiii, 1–26, 123 pls.

III. Smithsonian Institution. | United States National Museum. | Special Bulletin. | —— | Life histories | of | North American birds, | from the parrots to the grackles, | with special reference to | their breeding habits and eggs, | By | Charles Bendire, captain and brevet major, U. S. A. (retired), | Honorary Curator of the Department of Oölogy, U. S. National Museum | member of the American Ornithologists' Union. | with | seven lithographic plates. | —— | Washington: | Government Printing Office. | 1895.

4to., pp. ix, 1–518, 7 pls.

IV. Smithsonian Institution. | United States National Museum. | —— | Special Bulletin. | —— | American Hydroids. | —— | Part I. | The Plumularidæ, | with thirty-four plates. | By | Charles Cleveland Nutting, | Professor of Zoology, University of Iowa. | —— | Washington: | Government Printing Office. | 1900.

4to., pp. ii, 1–285, 34 pls., 124 figs.

VI. CIRCULARS OF THE U. S. NATIONAL MUSEUM.[1]

(NOS. 1–50.)

C. 1. Organization of the U. S. National Museum. By G. Brown Goode.
8vo., 1881, pp. 1–58.

C. 2. Circular addressed to friends of the Museum. By Spencer F. Baird.
8vo., 1881, pp. 1–2.

C. 3. Circular in reference to petroleum collections. By Spencer F. Baird.
8vo., 1881, pp. 1–2.

C. 4. Circular concerning the department of insects. By Spencer F. Baird.
8vo., 1881, 1 page.

C. 5. Establishment and officers.
8vo., 1881, pp. 1–2.

C. 6. Classification and arrangement of the materia medica collection. By James M. Flint, U. S. N.
8vo., 1881, pp. 1–2.

C. 7. A classification of the forms in which drugs and medicines appear and are administered. By James M. Flint, U. S. N.
8vo., 1881, pp. 1–7.

C. 8. Memoranda for collectors of drugs for the materia medica section of the National Museum. By James M. Flint, U. S. N.
8vo., 1881, pp. 1–2.

C. 9. Circular in reference to the building-stone collection. By Spencer F. Baird.
8vo., 1881, pp. 1–6.

C. 10. Two letters on the work of the National Museum. By Barnet Phillips.
8vo., 1881, pp. 1–10.

C. 11. A provisional classification of the food collections. By G. Brown Goode.
8vo., 1881, pp. 1–22.

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[1] Circulars 1–18 reprinted in Proceedings U. S. National Museum, Volume IV.
Circulars 19–23 reprinted in Proceedings U. S. National Museum, Volume VI.
Circulars 24–31 reprinted in Proceedings U. S. National Museum, Volume VII.
Circulars 32 33 reprinted in Proceedings U. S. National Museum, Volume VIII.
Circular 35 reprinted in Report U. S. National Museum, 1886, p. 25.
Circular 37 reprinted in Proceedings U. S. National Museum, Volume X.

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C, [illegible]. [illegible] of the materia medica collection of the U. S. National Museum, and catalogue of specimens. By James M. Flint, U. S. N.
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C, 20. Request for specimens of drugs and information concerning them. By Spencer F. Baird.
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C, 22. Brief directions for removing and preserving the skins of mammals. By William T. Hornaday.
8vo, 188[illegible], [illegible] pp.

C, 23. Instructions for taking paper molds of inscriptions in stone, wood, bronze, etc. Prepared by A. P. Niblack, U. S. N.
8vo, 188[illegible], [illegible] pp.

C, 24. Plan of a collection to illustrate the textile industries of the United States, to be exhibited at the World's Industrial and Cotton Centennial Exposition of 1884–85, at New Orleans. By Romyn Hitchcock.
8vo, 1884, pp. 1–16.

C, 25. Preliminary plan for a collection of the building and ornamental stones and rocks of the United States, to be exhibited at the World's Industrial and Cotton Centennial Exposition of 1884–85, at New Orleans. By George P. Merrill.
8vo, 1884, pp. 1–2.

C, 26. Plan for a collection of gems and precious stones, to be exhibited at the Cincinnati Industrial Exposition and the World's Industrial and Cotton Centennial Exposition of 1884–85, at New Orleans. By F. W. Clarke.
8vo., 1884, pp. 1–2.

C. 27. Directions for collecting, preserving, and transporting tortricids and other small moths. By C. H. Fernald.
8vo., 1884, pp. 1-3.

C. 28. Directions for mound exploration. By Cyrus Thomas.
8vo., 1884, pp. 1-3.

C. 29. Provisional plan for a collection of mammals to be exhibited at the World's Industrial and Cotton Centennial Exposition of 1884-85, at New Orleans. By Frederick W. True.
8vo., 1884, pp. 1-27.

C. 30. A list of birds the eggs of which are wanted to complete the series in the National Museum, with instructions for collecting eggs. By Charles E. Bendire, U. S. A.
8vo., 1884, 4 pp.

C. 31. Plan to illustrate the mineral resources of the United States and their utilization, at the World's Industrial and Cotton Centennial Exposition of 1884-85, at New Orleans. By Fred. P. Dewey.
8vo., 1884, 8 pp.

C. 32. Classification of the materia medica collection of the U. S. National Museum, and catalogue of specimens. By James M. Flint, U. S. N. (Revised and extended by Dr. Henry G. Beyer, U. S. N.)
8vo., 1885, pp. 1-39.

C. 33. Notes on the preparation of rough skeletons. By Frederic A. Lucas.
8vo, 1885, pp. 1-8, 12 figs.

C. 34. Circular for the guidance of persons desiring to make exchanges of birds or birds' eggs with the National Museum.
8vo., 1886, 1 page.

C. 35. Concerning the lending of type specimens. By Spencer F. Baird.
8vo., 1886, 1 page.

C. 36. Circular concerning the department of antiquities. By S. P. Langley.
8vo., 1887, 6 pp., 17 figs.

C. 37. Catalogue of the contributions of the section of graphic arts to the Ohio Valley Centennial Exposition, Cincinnati, Ohio, 1888. By S. R. Koehler.
8vo., 1887, 31 pp.

C. 38. Contributions of the department of transportation and engineering to the Ohio Valley Centennial Exposition, 1888. By J. Elfreth Watkins.
8vo., 1888, pp. 1-18.

C. 39. The contribution of the section of oriental antiquities to the Ohio Valley Centenial Exposition. By Cyrus Adler.
8vo., 1888, pp. 1-7.

C. 40. Description of exhibit made by the department of prehistoric anthropology in the National Museum at the Ohio Valley and Central States Exposition in Cincinnati, Ohio, 1888. By Thomas Wilson.
8vo., 1888, pp. 1–33, 50 figs.

C. 41. Guide to a collection illustrating the families of mammals, exhibited in the Ohio Valley Centennial Exposition in 1888 by the U. S. National Museum. By Frederick W. True.
8vo., 1888, pp. 1–26.

C. 42. Circular relating to prehistoric anthropology. By Thomas Wilson.
8vo., 1888, pp. 1–16, 4 figs.

C. 43. To the correspondents of the U. S. National Museum. By G. Brown Goode. [With a view to securing accessions for the library.]
8vo., 1894, 1 page.

C. 44. To the correspondents of the U. S. National Museum. By G. Brown Goode. [With a view to securing publications for the library in exchange.]
8vo., 1894, pp. 1–8.

C. 45. To the correspondents of the U. S. National Museum. By G. Brown Goode. [With a view to securing authors' separates and reprints for the library.]
8vo., 1894, 1 page.

C. 46. [Regarding the proposed revision of Bulletin 22, relating to the flora of the District of Columbia.] By G. Brown Goode.
8vo., 1895, 2 pp.

C. 47. Circular in regard to the identification of specimens of mollusks by the National Museum. By G. Brown Goode.
8vo., 1895, 2 pp.

C. 48. Circular in regard to bones and teeth of the mastodon and mammoth. By Frederic A. Lucas.
8vo., 1897, pp. 1–4, 2 figs.

C. 49. [Circular relating to the North American Violaceæ.] By Frederick W. True.
8vo., 1899, 1 page.

C. 50. [Circular transmitting questions relating to birds and birds' eggs.] By Richard Rathbun.
8vo., 1901, 3 pp.

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[In the references the following abbreviations are used: R.=paper printed in the Reports; P.=paper printed in the Proceedings; B.=Bulletin; Sp. B.=Special Bulletin; C.=Circular. The references under certain special headings, such as U. S. Fish Commission, etc., are necessarily incomplete, as this is only an index of *titles*. References to persons whose names occur in the titles, but who are not themselves the authors of the papers, are placed in brackets.]

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[1] For a complete list of papers relating to the work of the "Albatross" see "Dredging and other records of the 'Albatross,' with bibliography relative to the work of the vessel," compiled by C. H. Townsend and published in the Report of the U. S. Fish Commission for 1900.

[2] In addition to the above-numbered series the following papers, printed in the Proceedings subsequent to Volume XVIII, are based wholly or in part on "Albatross" collections: Nos. 1114, 1115, 1161, 1162, 1213, 1236, 1239, 1241, 1244, 1259, 1261.

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